



Date: August 2024

MS4 Forest Conservation Credit - Frequently Asked Questions (FAQ)

I. Introduction

Forested land cover has the lowest Phase 6 Model unit loads for nutrients and sediments, and preserving established forest acres that are vulnerable to development pressure is critical to protecting water quality in Maryland. In order to accurately capture the influence of Maryland’s many State conservation programs, Maryland Department of the Environment (MDE) and the Chesapeake Bay Program (CBP) developed a Phase 6 Bay Model scenario that incorporates the continued conservation of many state conservation programs in order to forecast development patterns out to 2025. The resulting model scenario that includes State conservation activity was utilized by MDE as the baseline predicted 2025 land use for the Phase III Chesapeake Bay Watershed Implementation Plan (Phase III WIP). While the Phase III WIP 2025 land use incorporates continued State conservation activity, it does not include any County programs. The Forest Conservation Best Management Practice (BMP) represents an opportunity for Phase I jurisdictions to receive Municipal Separate Storm Sewer System (MS4) credit for forest conservation/preservation actions that were not incorporated into the Phase III WIP.

II. MS4 Equivalent Impervious Acres

Equivalent Impervious Acre (EIA) credit is available to MS4 jurisdictions that have implemented forest conservation/preservation easements that limit development on forest and go above and beyond the State conservation programs incorporated into Maryland’s projected Phase III WIP 2025 land-use condition. As the Forest Conservation Phase I MS4 Credit is intended to provide credit for preventing a future land use change of forested land cover to an urban land use, credit is contingent upon demonstrating development pressure on the proposed easement. EIA credit for Forest Conservation (Table 1) is calculated as the difference between the Total Urban (Impervious and Turf combined) unit load and the Forested unit load from the Phase 6 Chesapeake Bay Model.

Table 1. Load Reductions and EIA for Forest Conservation BMPs

Land Use Conversion BMP	Load Reduced (lbs/acre/yr)			EIA per Acre of Forest Conserved
	TN	TP	TSS	
Forest Conservation	10.57	1.10	2,465	0.46

III. Eligibility

Forest Conservation easements will be approved for Phase I MS4 EIA credit on a case-by-

case basis. Forested areas that are placed into a permanent easement are eligible for credit if the acres are not part of a State conservation program, State required mitigation, or other BMP. An eligible easement must also be under development pressure. Additionally, the creditable area within a Forest Conservation/Preservation easement must be natural land cover that is >50% forest at the time of the easement establishment, and the creditable area is limited to areas considered “developable” (e.g. outside of the 100-yr floodplain).

A. Easement Requirements

1. Acres intended for Forest Conservation credit must be held in an easement that is demonstrably permanent.
2. The Forest Conservation/Preservation easement intended for Phase I MS4 EIA credit must have a management plan that details acceptable management actions (such as mowing, invasive species removal, pesticide use, etc.) and restricts actions like tree removal.

B. Credit Limitations

1. Areas that may receive credit cannot be used to address other State requirements related to the land development process. This includes, but is not limited to: mitigation for impacts in Tier II waters, wetlands mitigation, State forest conservation requirements, or stormwater management.
2. The eligible easement is not part of, or reported as, a Program Open Space, Rural Legacy, Maryland Agricultural Land Preservation Foundation (MALPF), or Maryland Environmental Trust (MET) easement.
3. Acres intended for Phase I MS4 Forest Conservation/Preservation EIA credit cannot be incorporated into any other Stormwater Best Management Practice (BMP).

C. Creditable Area

1. Forest Conservation/Preservation credit is available for areas within the proposed Forest Conservation easement that are at **least** 50% forested cover at the time of creation. The remaining land cover must be a natural land use (scrub/shrub, wetlands, barren, etc.). While Forest Conservation/Preservation easement parcels may include a development envelope or existing non-natural land use (such as a lawn, a home, driveway, or other structures), the *creditable portion of the easement* must be existing forest or another natural land use that may undergo succession in the future to fill in gaps in the forest cover.

Table 1 provides a list of all Natural land use categories from the Chesapeake Conservancy Land Use/Land Cover raster product. MDE encourages the use of a land cover product when delineating the creditable area within a Forest Conservation/Preservation easement, however it is not required. Jurisdictions may delineate the creditable forested and natural areas by hand using the latest available

imagery or georeferenced site plans. See the “Documentation” section of this document for more information on how to delineate and report Forest Conservation/Preservation easements for credit.

Transitional Barren	Suspended Succession Barren	Suspended Succession Herbaceous
Suspended Succession Scrub/Shrub	Tree Canopy Over Turf Grass	Forest
Other Tree Canopy	Harvested Forest Barren	Harvested Forest Herbaceous
Natural Succession Barren	Natural Succession Herbaceous	Natural Succession Scrub/Shrub
Tidal/Riverine/Terrene Wetlands Barren	Tidal/Riverine/Terrene Wetlands Herbaceous	Tidal/Riverine/Terrene Wetlands Scrub/Shrub
Tidal/Riverine/Terrene Wetlands Tree Canopy	Tidal/Riverine/Terrene Wetlands Forest	

Table 1. List of Chesapeake Conservancy Land Use/Land Cover land use categories that qualify as Natural for the purposes of Forest Conservation/Preservation crediting.

2. Jurisdictions should report only the areas that would undergo forest removal in a development scenario. MDE considers the 100-year floodplain, existing BMPs, and any land within State conservation easements to be undevelopable. **Figure 1** demonstrates how to delineate creditable acres by removing any areas that are within a 100-year effective floodplain.

Jurisdictions may utilize their own local floodplain maps in addition to the 100-year floodplain when delineating areas that are eligible for Forest Conservation/Preservation credit. While jurisdictions may choose to supplement additional floodplain mapping to identify the undevelopable areas within Forest Conservation/Preservation easements or parcels, local floodplain delineations may only be used to add more stringent floodplain coverage - not to redefine the existing 100-year floodplain.

- a. If an easement is entirely within the areas specified above (e.g. The 100-yr floodplain), it is not available for Forest Conservation/Preservation credit. Jurisdictions may request for a revision of the credit eligibility on a case-by-case basis, with demonstration that the parcel under consideration for credit would undergo a conversion from forested land use to urban land use. MDE considers “development” to be a combination of turf and impervious surfaces (buildings, roads, parking lots, etc.) that constitute a significant portion of the landscape. While forest removal within the floodplain to accommodate walking paths or park/lawn areas may occur, these would be negligible and would not be an exception.

D. Development Pressure

1. To obtain Forest Conservation Credit for the forested area of an easement, the jurisdiction must demonstrate that there is existing development pressure which would otherwise result in removal of forested land use to accommodate urban use.

If jurisdictions cannot establish development pressure through the means described in the Accounting Document (which rely on development plans to demonstrate the potentially credited area would be deforested for development), they may propose credit using an alternative justification. Credit eligibility will be determined on a case-by-case basis.

IV. Documentation

Jurisdictions are required to submit the following when submitting easement acres for Forest Conservation credit:

- Easement site location, size, and existing land use.
- Documentation of development that the easement is intended to prevent. This may include but is not limited to construction applications, site designs, or development planning materials that demonstrate planned conversion of a forested land cover to a developed land use.
 - If site designs are unavailable, jurisdictions may demonstrate development pressure using Master Plans, Comprehensive Plans, Priority Funding Areas, zoning information, sewer coverage, etc. This justification should be communicated to the permit administrator along with any relevant attachments (map of the proposed easement and creditable area, site plans, comprehensive plans, etc.). MDE shall provide reviews of case-by-case determinations of development pressure. Jurisdictions are encouraged to communicate any approval timeline needs within the proposal so that MDE can accommodate time-sensitive crediting approvals as necessary.
- The locations and sizes of any proximate State-required forest conservation or mitigation easements in order to verify the acres claimed for forest conservation credit do not overlap with State required mitigation.
- Documentation of triennial inspections to ensure compliance with easement requirements and retention of credit.

Frequently Asked Questions

Question: Are forested areas *adjacent* to State-required mitigation easements eligible for Forest Conservation credit?

Answer: Acres that are held in a permanent easement that go above and beyond any State-required mitigation (e.g., due to the Forest Conservation Act) can be submitted for Forest Conservation credit. For example, if the Forest Conservation Act requires a minimum easement of 5 acres as a mitigation action for development and a jurisdiction establishes a 10-acre easement, the Forest Conservation credit can be claimed for the additional 5 acres.

Question: Will Forest Conservation credit be re-evaluated if the credited easement is impacted by other management actions such as Stream Restoration?

Answer: Forest Conservation easements are required to have management plans that limit actions on the easement such as tree removal. If stream restoration impacts the easement by removal of existing forested cover, the credit no longer meets the requirements of the management plan and Forest Conservation BMP eligibility and would be re-evaluated.

Additionally, any tree removal within the limit of disturbance for the stream restoration project but outside the stream restoration creditable floodplain that alters the creditable area of the forest conservation easement must be accounted for. See **Figure 2** for an example of how the creditable area of a Forest Conservation/Preservation easement would be revised to remove the extent of a planned Stream Restoration.

Question: If a jurisdiction utilizes a Land Trust to establish easements, are there Land Trust Accreditation requirements?

Answer: Counties are welcome to set these requirements for their own Forest Conservation/Preservation programs. If easements submitted for credit adhere to the credit requirements in the 2021 Accounting Guidance, it is up to the individual jurisdiction to set additional requirements for a Land Trust.

Question: Will a jurisdiction be able to apply for Forest Conservation credit for already existing easements that meet the criteria for Forest Conservation? Or is this credit only available for easements associated with new development?

Answer: Only Forest Conservation Easements established during the current permit term are available for credit.

Question: Can a jurisdiction apply for Forest Conservation credit for areas of Conservation Landscaping within permanent easements that transition into Forest through succession?

Answer: The credit is intended to prevent the loss of existing forest to urban land use. If a proposed easement is not greater than 50% forest cover, or has no forest cover but is in a transitional area, it does not qualify as an existing forest. Areas that are scrub/shrub land cover that are supplemented with saplings to meet the density requirements of the Forest Planting BMP may be eligible for revised Forest Planting credit, but do not meet the requirements for Phase I MS4 Forest Conservation credit.

Question: What happens if there are changes or updates to State Forest Conservation Laws such as the Forest Conservation Act?

Answer: Counties with local forest ordinances can obtain credit for the difference between the State-level Forest Conservation Act requirements and the local ordinance, which is verified through easement boundaries submitted by permittees. If State policy changes (e.g., a revision to the Forest Conservation Act adds new requirements), permittees would not be eligible for Forest Conservation Credit for those actions taken to meet any State law.



Figure 1. Example of a potential Forest Conservation/Preservation easement with Land Use (Chesapeake Conservancy, 2018) and the 100-year Effective Floodplain (FEMA) delineated (above) and the Non-Creditable area delineated (below). Impervious, Tree Canopy over Impervious, and Turf are urban uses and are not eligible for Forest Conservation/Preservation Credit. Agricultural land use and areas within the 100-year floodplain are not eligible for credit.

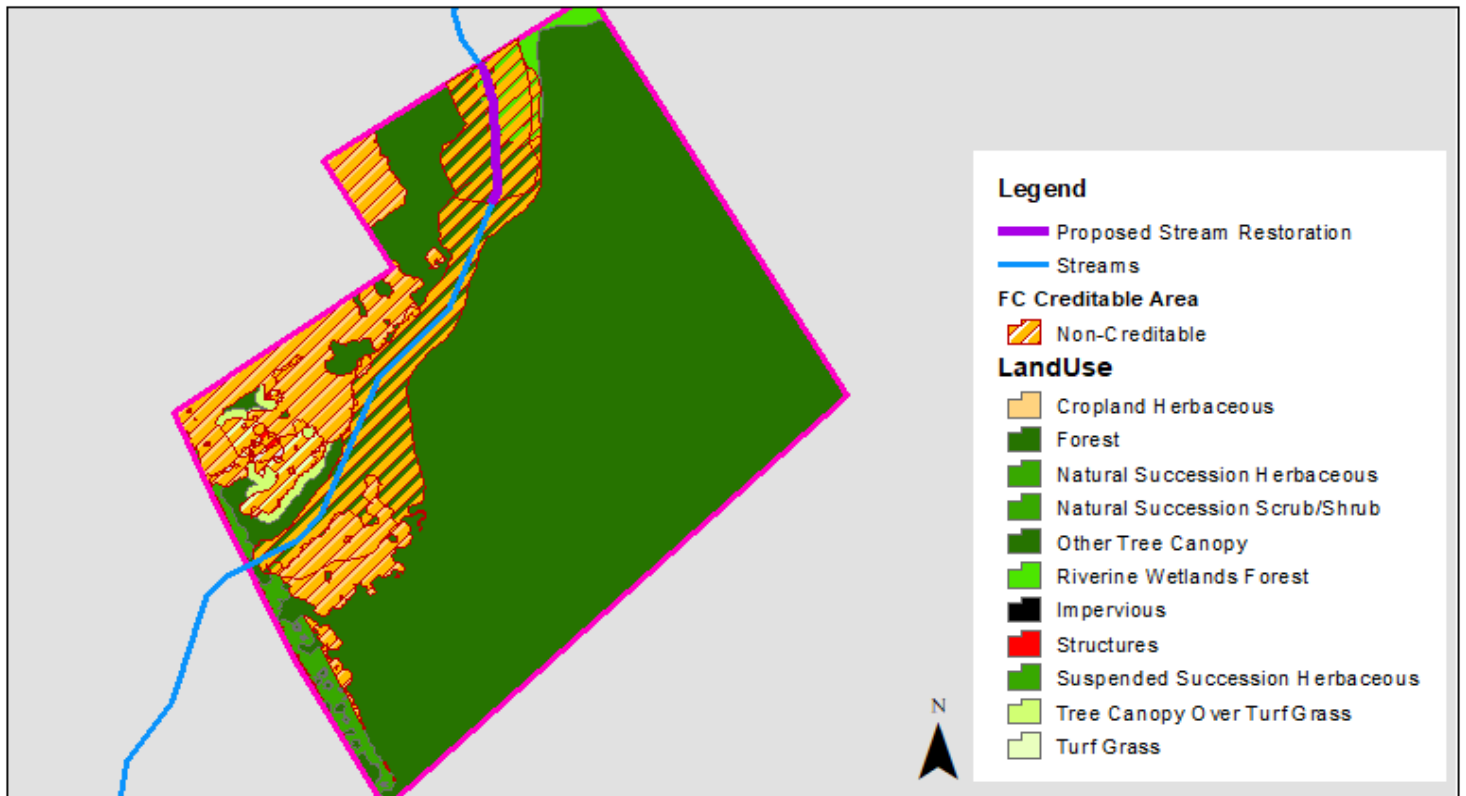
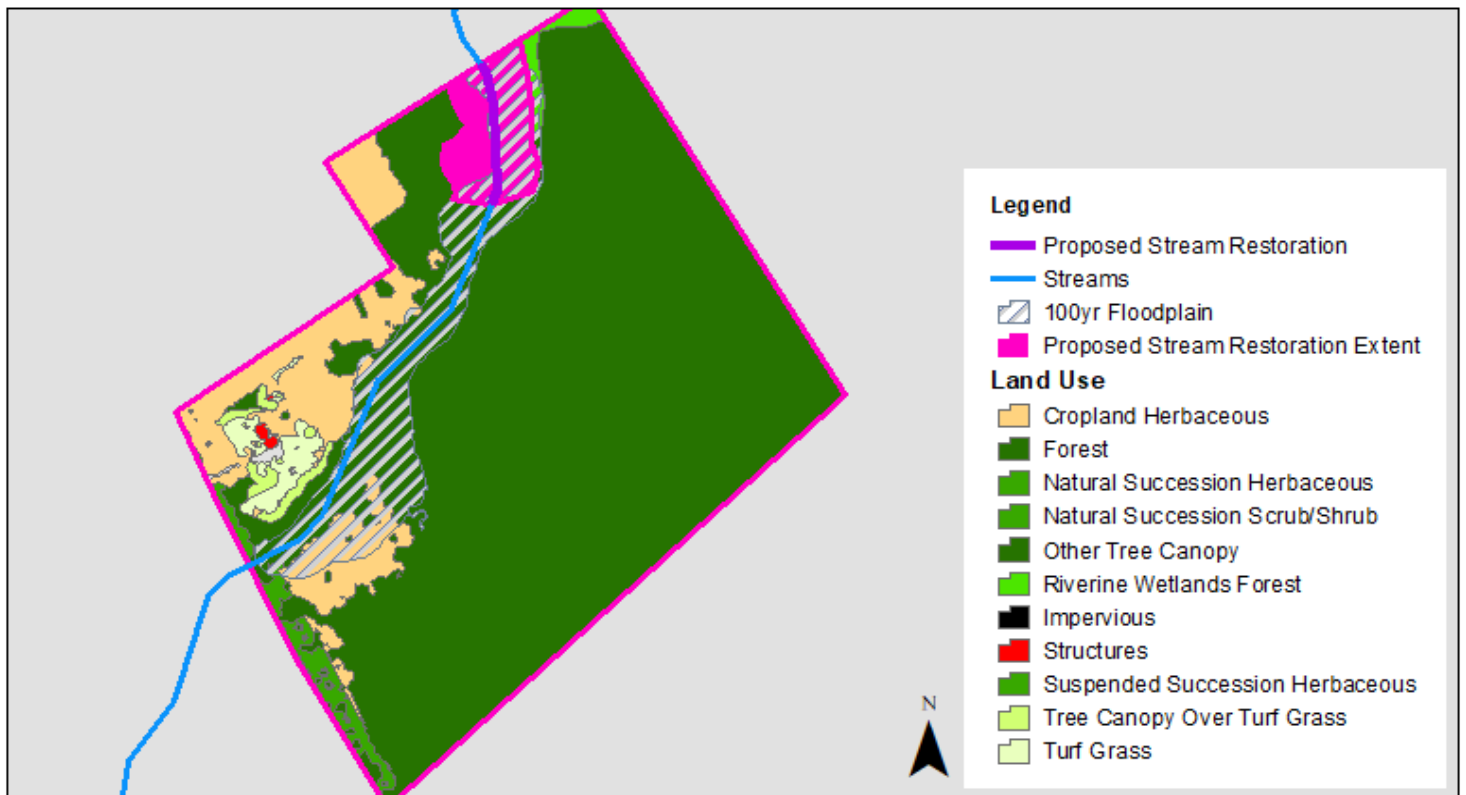


Figure 2. Example of a potential Forest Conservation/Preservation easement with Land Use, the 100-year Effective Floodplain (FEMA), and a proposed Stream Restoration project Extent delineated (above) and the Non-Creditable area delineated (below). The Non-Creditable area for a Forest Conservation/Preservation easement would be revised to include the extent of any stream restorations that are planned within the easement.